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GRAIL 0.6
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Grail(TM) is a web browser written in Python, an object-oriented scripting language. Grail is distributed in source form. It requires that you have a Python interpreter and a Tcl/Tk installation, with the Python interpreter configured for Tcl/Tk support.

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Licensing issues

The license of Grail allows essentially unrestricted use and redistribution. The full text of the license can be found in the file LICENSE in this directory. The sources are Copyright (c) CNRI 1996-1999. Grail is a registered trademark of CNRI.

Future development

Given the low usage of Grail, CNRI cannot allocate further resources to this project. The license allows for derivative projects, so anyone who has a need for a Python-based or easily modified Internet browser is free to use the Grail source code as a basis for a new project.

The Grail development team would be happy to provide anyone seriously interested in using Grail as the basis for a new project with a copy of the CVS repository. We are also able to provide pointers from the Grail Web site to any new projects that spring up based on Grail.

Hardware requirements

Grail runs on most Unix systems, on Windows NT and 95, and on Macintosh systems, provided you have enough memory and a fast enough machine. (For Windows, 32 Meg RAM and 90 MHz Pentium is a reasonable minimal configuration. For Macintosh, a 40 MHz 68k or any PPC, with 24 Meg RAM, is acceptable.)

Installation

There are three steps to take before you can use Grail:

- Install Tcl and Tk. The versions must be compatible with each other and with the Python version you are installing in the next step; currently, the oldest Tcl/Tk version supported is 8.0. You can get Tcl/Tk it at <http://www.scriptics.com/>; or try ftp to ftp.sunlabs.com in directory /pub/tcl/.
- Install Python 1.5 (or newer if available), configured for use with Tk. The URL to get Python is <http://www.python.org/>; or try ftp to ftp.python.org in directory /pub/python/src/. You must enable Tk support by editing the file Modules/Setup; see the comments in that file (search for "tkinter") and the main README that comes with Python.
- Install the Grail sources in a convenient place. Grail is executed directly from its source directory. If you are using the /usr/local

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hierarchy, the Grail sources could be installed in
/usr/local/lib/grail/.

You can also choose to leave grail.py unchanged and have a shell script named "grail" which execs the Python interpreter, e.g.:

```
exec python /usr/local/lib/grail/grail.py ${1+"$@"}
```

(On Windows or Macintosh systems, the best thing to do is to create a shortcut or alias to the file grail.py on the desktop.)

Using Grail

If the first line of the grail.py script points to a working Python interpreter with Tk support, you should be able to start Grail by executing "./grail.py" in the Grail source directory. Grail figures out where the source directory is by inspecting sys.argv[0], so in fact typing the pathname to the script from anywhere should work.

Command line options:

The "-g <geometry>" option lets you specify an initial geometry for the first browser window in the standard X11 geometry form: [width]x[height][+<x>+<y>], where all dimensions are measured in pixels. It is also possible to set the width and height (in character units) through the General preference panel.

The "-i" option inhibits loading of images for this session. This option can also be set via the General preference panel.

The "-d <display>" option lets you override the \$DISPLAY environment variable.

Advanced users with a grailrc.py file can use "-q" to inhibit processing of grailrc.py. This may be useful during debugging.

Command line arguments:

The only positional command line argument is an optional URL of a page to display initially. This does not become your "home page"; use the General preference panel to change the page loaded by the Home command in the Go menu, and to choose whether this page should be loaded initially if no URL is given on the command line.

Web resources

More information on using Grail can be found through the Grail home page, at this URL:

<http://grail.cnri.reston.va.us/grail/>

This page is also accessible through the "Grail Home Page" item of the Help menu.

Feedback

Grail 0.6 is the last version of Grail to be released by CNRI. If a new project based on Grail appears, we will be glad to point to it from the Grail Web site, but we are not prepared to respond to bug reports.

Refer to the Grail Web site to determine if any derived projects have been started.

Epilogue

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"Everything should be made as simple as possible, but no simpler."

--Albert Einstein

"Nothing is as simple as we hope it will be."

--Jim Horning

"Simple is as simple does."

--Forrest Gump